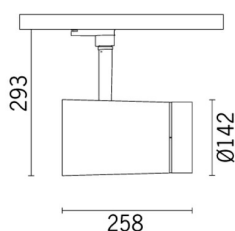## Palco

Design Artec Studio	iGuzzini

Last information update: April 2025

Product configuration: P238
P238: neutral white large body spotlight - DALI ballast- wide flood optic

Product code
P238: neutral white large body spotlight - DALI ballast- wide flood optic

Technical description
Adjustable spotlight with adapter for installation on DALI track for high output LED lamp with monochrome emission in a Neutral White (4000K) tone. DALI ballast integrated in the product. Luminaire made of die-cast aluminium and thermoplastic material, allows 360° rotation about the vertical axis and 90° tilting relative to the horizontal plane. The luminaire has mechanical aiming locks for both movements, operated using the same tool on two screws, one at the side of the rod and one on the adapter for the track. Passive heat dissipation. Reflector in superpure mirrored aluminium with special faceting that improves the distribution of the light beam (OPTIBEAM). Spotlight can hold up to two flat accessories at the same time. Another external component can also be applied, selected from directional flaps and an anti-glare screen. All external accessories rotate 360° about the spotlight longitudinal axis.

Installation
On a DALI electrified track

Colour	Weight (Kg)
White (01) | Black (04)	3.05

Mounting
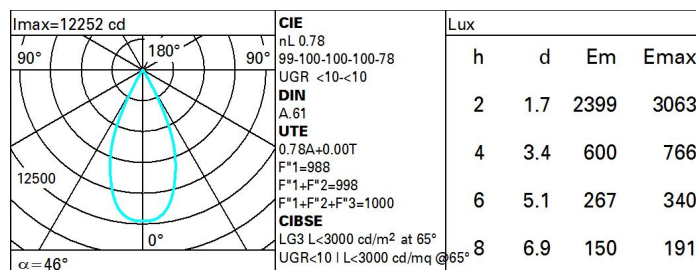dali track|wall surface|ceiling surface

Wiring
DALI components housed in the luminaire

Sistemi_di_controllo_compatibili:
Quick BLE ☑
Quick DALI - Touch display 7" ☑
Quick DALI LMS Quick ☑
Master Pro Evo KNX ☑

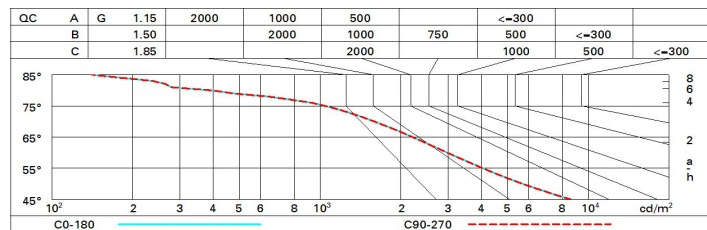Complies with EN60598-1 and pertinent regulations

Technical data

lm system:	6279	MacAdam Step:	2
W system:	56.4	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
lm source:	8050	Lamp code:	LED
W source:	51	Number of lamps for optical assembly:	1
Luminous efficiency (lm/W, real value):	111.3		
		ZVEI Code:	LED
lm in emergency mode:	-	Number of optical assemblies:	1
Total light flux at or above an angle of 90° [Lm]:	0	Power factor:	See installation instructions
Light Output Ratio (L.O.R.) [%]:	78	Inrush current:	10 A / 200 µs
Beam angle [°]:	46°	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 18 luminaires B16A: 30 luminaires C10A: 31 luminaires C16A: 51 luminaires
CRI (minimum):	80		
Colour temperature [K]:	4000		
		Overvoltage protection:	5kV Common mode & 4kV Differential mode
		Control:	DALI-2

Polar

Imax=12252 cd

α=46°

CIE
nL 0.78
99-100-100-100-78
UGR <10-<10
DIN
A.61
UTE
0.78A+0.00T
F"1=988
F"1+F"2=998
F"1+F"2+F"3=1000
CIBSE
LG3 L<3000 cd/m² at 65°
UGR<10 l L<3000 cd/mq @65°

Lux			
h	d	Em	Emax
2	1.7	2399	3063
4	3.4	600	766
6	5.1	267	340
8	6.9	150	191

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	70	66	64	62	66	63	63	61	78
1.0	73	70	68	66	69	67	67	64	82
1.5	77	74	73	71	74	72	71	69	88
2.0	79	78	76	75	76	75	74	72	93
2.5	81	79	78	77	78	77	77	74	95
3.0	82	81	80	79	80	79	78	76	97
4.0	83	82	82	81	81	80	79	77	99
5.0	83	83	82	82	82	81	80	78	100

Luminance curve limit

QC	A	G	1.15	2000		1000		500		<=300		
	B		1.50			2000		1000	750	500	<=300	
	C		1.85					2000		1000	500	<=300

85°
75°
65°
55°
45° 10^2 2   3   4   5   6   8 10^3 2   3   4   5   6   8 10^4 cd/m²

8
6
4
2
a
h

C0-180 ——————   C90-270 -------------

UGR diagram

Corrected UGR values (at 8050 lm bare lamp luminous flux)

Riflect.:										
ceil/cav	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls	0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim		viewed					viewed			
x y		crosswise					endwise			

x	y										
2H	2H	9.8	10.4	10.1	10.6	10.9	9.8	10.4	10.1	10.6	10.9
	3H	9.8	10.3	10.1	10.6	10.9	9.7	10.3	10.1	10.5	10.8
	4H	9.7	10.2	10.1	10.5	10.8	9.7	10.2	10.0	10.5	10.8
	6H	9.7	10.1	10.0	10.4	10.8	9.6	10.1	10.0	10.4	10.7
	8H	9.6	10.1	10.0	10.4	10.7	9.6	10.0	9.9	10.4	10.7
	12H	9.6	10.0	10.0	10.3	10.7	9.5	10.0	9.9	10.3	10.7
4H	2H	9.7	10.2	10.0	10.5	10.8	9.7	10.2	10.1	10.5	10.8
	3H	9.7	10.1	10.0	10.4	10.8	9.7	10.1	10.1	10.4	10.8
	4H	9.6	10.0	10.0	10.4	10.7	9.6	10.0	10.0	10.4	10.7
	6H	9.6	9.9	10.0	10.3	10.7	9.6	9.9	10.0	10.3	10.7
	8H	9.5	9.8	9.9	10.2	10.7	9.5	9.8	10.0	10.2	10.7
	12H	9.5	9.7	9.9	10.2	10.6	9.5	9.7	9.9	10.2	10.6
8H	4H	9.5	9.8	10.0	10.2	10.7	9.5	9.8	9.9	10.2	10.7
	6H	9.4	9.7	9.9	10.1	10.6	9.4	9.7	9.9	10.1	10.6
	8H	9.4	9.6	9.9	10.1	10.6	9.4	9.6	9.9	10.1	10.6
	12H	9.3	9.5	9.8	10.0	10.5	9.3	9.5	9.8	10.0	10.5
12H	4H	9.5	9.7	9.9	10.2	10.6	9.5	9.7	9.9	10.2	10.6
	6H	9.4	9.6	9.9	10.1	10.6	9.4	9.6	9.9	10.1	10.6
	8H	9.3	9.5	9.8	10.0	10.5	9.3	9.5	9.8	10.0	10.5

Variations with the observer position at spacing:

S =	1.0H	5.1 / -5.3	5.1 / -5.3
	1.5H	7.8 / -6.9	7.8 / -6.9
	2.0H	9.8 / -8.1	9.8 / -8.1